

# CloudSat and GLOBE

## CloudSat Education Network (CEN)



Mrs. Deanna Tebockhorst<sup>1</sup>, Dr. Todd Ellis<sup>2</sup>  
Mr. Peter Falcon<sup>3</sup>  
GLOBE Partner Meeting San Francisco

<sup>1</sup>. Colorado State University, Fort Collins, CO

<sup>2</sup>. SUNY College at Oneonta New York

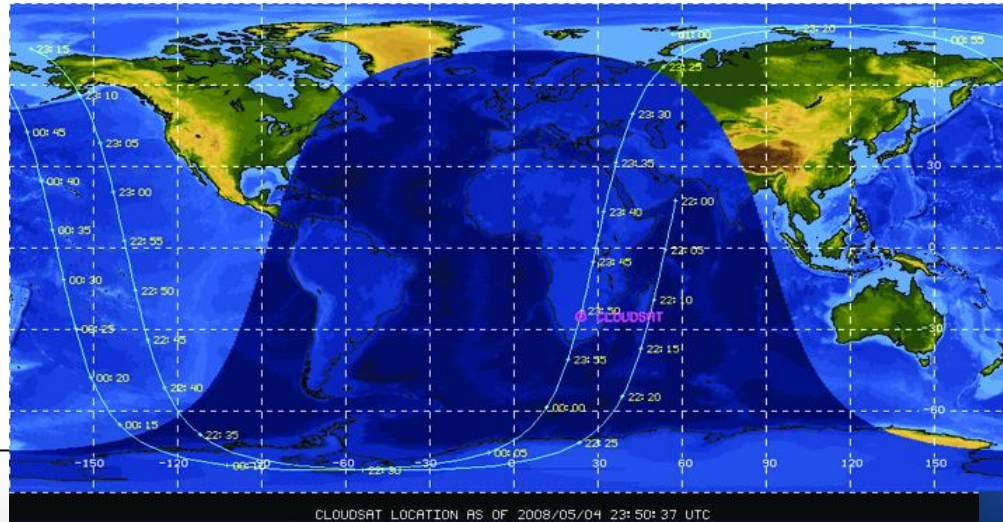
<sup>3</sup>. Jet Propulsion Laboratory, Pasadena, CA



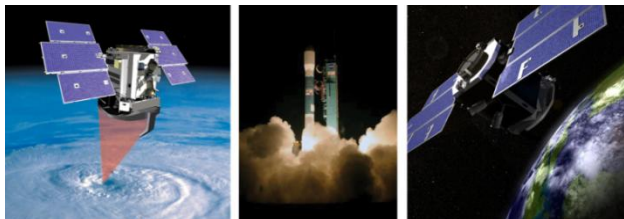


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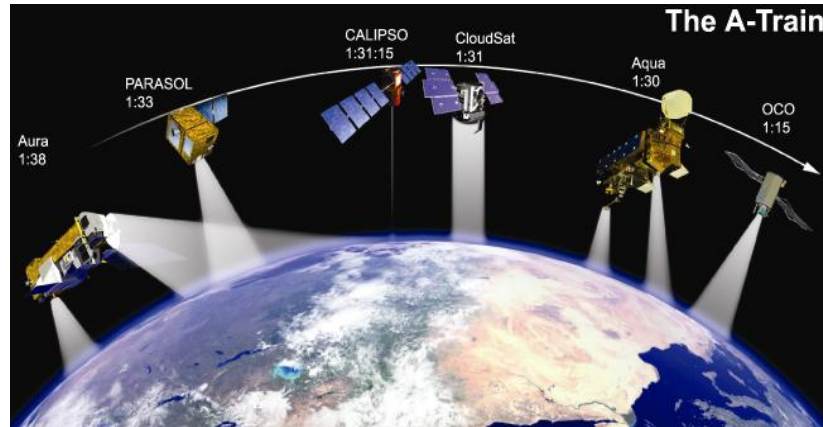
GLOBE students make cloud observations and collect data for their research as well as provide ground-based observations to CloudSat scientists.



Every 16 days, after 233 revolutions of the Earth, CloudSat crosses the equator at exactly the same geographic longitude as it did before.



# CEN schools observing clouds along with CloudSat







# CEN Leads and Coordinators



- Dr. Todd Ellis, Dept. Of Earth Sciences SUNY College at Oneonta, New York
- Mrs. Deana Tebockhorst, CloudSat Outreach Coordinator, Colorado State University
- Mr. Peter Falcon, Earth Science Education and Public Outreach JPL, Pasadena California



Still No  
Football team?



**Steelers  
Nation**

# CEN Colorado GLOBE Partners



*Colorado State University*

Colorado held 8 workshops last year.





# California GLOBE Partner



- **JPL Open House (May 14-15, 2011):** Cloudsat Education & Public Outreach will once again support JPL's annual Open House. The 2 day event reaches a broad audience of 30,000-50,000 from Northern California to Baja California. This year a 20' x 30' Earth science activities area will be available, we could potentially use this area to demo GLOBE protocols or other activities. Suggestions welcomed!
- **Wagner Ranch School Presentation:** Dr. Todd Ellis and Peter Falcon presented to a GLOBE/CEN school Wagner Ranch Elementary in Orinda CA. Dr. Ellis demonstrated hands on activities in atmospheric pressure, how to make a cloud in a bottle, and demonstrated the difference between scattering and absorption of light in the atmosphere
- **GLOBE Partnership in CA. :** Thanks to the GLOBE helpdesk I have received 4 inquires from teachers and fellow NASA outreach coordinators from Southern California to be trained in GLOBE protocols, and become GLOBE partners (Great News!). NASA works slow (Bad News ☹). I'm still waiting for approval to purchase GLOBE kit.



Dr. Matt Rogers at last years  
Open House



Dr. Todd Ellis presenting at Wagner Ranch  
Elementary Sch. at last years AGU conference





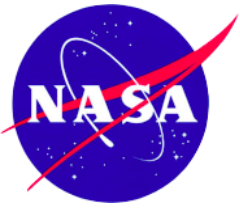


# Current Activities

- Training for using CEN, NASA, GLOBE data in classroom, especially related to clouds
- Coupling CEN/GLOBE observations to remote sensing data for schools in CEN
- Encouraging more inquiry – training on how to ask answerable scientific questions – focus of our Calgary PD event and most future trainings







# Teaching Inquiry using NASA Earth System Science



- New (soon to be funded) NASA grant to formally tie NASA and GLOBE Earth Science together for pre- and in-service teachers
- Introducing a newer model of PD in the form of a 5-week mini-course for pre-service teachers and 3-4 day workshops on combining GLOBE observations with existing NASA resources and data
- We will also develop an active online teaching and learning cohort to facilitate connections with NASA scientists, sharing learning activities, and virtual student poster sessions
- We also plan to establish an equipment grant program for higher-need schools who wish to get established as new GLOBE and CloudSat schools